



Research Letter from:... an Italian kennel

A Dog's Life

By our corresponding author, Zampa di Cane

It's a dog's life! How often do we hear this or similar grumbles about the demoralising hardships of graduate students and struggling postdocs? Especially here in Italy, where research pay and working conditions seem barely to have evolved in decades. However, huddled around their espressos, some of our researchers have repeatedly pointed out the unreliable scientific basis of this comparison to man's best friend – after all, what is a satisfactory measure of a "dog's life"?

Taking up the challenge, Lieta Marinelli and her colleagues at the University of Padua, present their analysis: "Quality of life of the pet dog: Influence of owner and dog's characteristics." (*Applied Animal Behaviour Science* 108:143-56). Obviously, research students are not pets, since their relationship to their thesis supervisor is closer to one of apprenticeship than that of master-servant or owner-pet. Besides, Marinelli's study was modelled on one of parents and children where "similar mechanisms also seem to occur." Nevertheless, some of Marinelli's findings are surprisingly reminiscent of laboratory hierarchies.

How to get an opinion from the dog?

A sample of 104 dog-owner "dyads" participated in the study and a multiple approach was used to assess how the characteristics of dogs (*Canis familiaris*) and their owners influenced the dog's quality of life (QoL). Owners filled out questionnaires describing their own and their dog's key characteristics, and how much care they gave to their dog. Obviously, unlike graduate students, the dog's own opinion could not be directly solicited, so a veterinarian also performed a physical examination to control for the accuracy of the owner's judgement, in particular noting the tell-tale "ear condition".

Owners also filled out a LAPS test (Lexington Attachment to Pets Scale) rating their response to statements like: "I don't spend a lot of time with my dog", "Quite often I confide in my dog", "I often talk to other people about my dog", "My dog and I have a very close relationship", "I love my dog because he/she is more loyal to me than most of the people in my life", "Having a dog adds to my happiness" and the critical "I think my dog is just a dog", in order to assess the emotional attachment of owners to their pets.

Again, it's difficult to get a second opinion from a dog but the level of the dog's attachment to its owner was investigated using the Strange Situation Test. This test, originally formulated to assess "the more uniform relationship between infant and mother", consists of a sequence of seven episodes during

which the dog is alone with its owner and/or with a stranger in an unfamiliar room. Two dogs were excluded from the statistical analysis of this test because their performances compromised its reliability – one worked out how to open the door and escaped and "the other did not react to the stimuli because of visual and auditory deficits due to its age (18 years)". Most dogs



"explored in the presence of the owner", this being defined as "activity directed towards unmovable aspects of the environment, including sniffing, visual inspection and oral examination". However, when away from the owner's gaze, whether on their own or with a stranger, the dogs simply stood "near the door with the face oriented to the exit".

Individuals that scored highly for attachment in the presence of their owner "did not behave passively". Conversely, individuals high in insecurity "did not explore". Some 15% of individuals showed low attachment, 14% high and the remaining 71% were somewhere in-between.

Marinelli finds that most pet dogs don't have such a hard life but admits that she only considered owners that were sufficiently motivated to take part in her QoL assessment. How representative are they of a typical dog's life?

Explore or not explore

"As expected, the owner is the fundamental member of the relationship." Owner characteristics that most influence the condition of the dog are "social life, experience in pet-ownership and willingness to keep a dog." Overall, "owner motivation is of great importance in determining the QoL of the pet dog", but "when owner life circumstances and dog rearing arrangements change the attachment, development can easily change direction, as seen between infant and mother, eventually affecting quality of life". Marinelli hopes that her studies will "promote owner education in management of the dog-owner relationship".

Now, if only we could apply similar QoL procedures to student-supervisor or postdoc group leader "dyads". It would be interesting to see who volunteered for such an in-depth study.

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